

432 MHz AND ABOVE EME NEWS

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EME NETS

14.345, 10 AM ET SATURDAYS, AFTER VARO NET SUNDAYS:

- **NET CONTL: JOE, K1RQG** (207-469-3492), E-MAIL: [Joe, K1RQG](#)
- **EME STANDINGS: JIM STARKEY, W0KJY, 3845 CAPITOL DRIVE, FT. COLLINS,**
CO 80526, (970) 226-0669)
- **THE NL WEB VERSION IS PRODUCED BY W6/PA0ZN AND AVAILABLE AT:**

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CONDITIONS

This is a very unusual month in that most of the reports are for 23 cm. Conditions were apparently good on 432, but there is not much of a sample. Most of the 1296 reports were positive, but I found copy difficult and did not consider the conditions on 23 cm to be particularly good during the June SW.

K1FO

Steve again had limited operating time over the activity weekend. Stations worked were on 20 Jun **KA0RYT, VE1ALQ and KR5V** (new call for **KN6M**), on 21 Jun **DL8OBU and SM3BYA**, and on 28 Jun **JA5OVU**. Steve found conditions good on the activity weekend, despite of the peak Sun declination. Most likely having the weekend at perigee helped signals. Steve was using a new Yaesu FT-847 during the weekend. Although the FT-847 is a nice "little" radio, it is not up to the performance of a high end HF transceiver like the TS-870S that he normally uses. After the activity weekend he added the 2.7 kHz and 500 Hz Collins mechanical filters to the FT-847 which helped the FT-847 greatly. A summary of Steve's review of the FT-847 appears at the end of this NL. 70 cm EME totals for K1FO are #532 initial, 49 states and 75 DXCC.

N6BQ

Hoppy's 23 cm EME activity report for June follows: I worked on 20 Jun **K2UYH, W2UHI, K5JL, DJ9YW, DF3RU (CWNR), W5LUA, K3HZO, DF9QX and OZ6OL**, and on 21 Jun **ZS6AXT, EA6ADW, LA8LF, SM3AKW, F2TU, K2UYH, ON5RR and W6HD** for initial #125. Others heard were **DH0OAH, K5JL, OH2AXH, OE9ERC, W5LUA, DJ9YW and W2UHI**. [I had a FB visit with Hoppy during a recent trip to CA. His station is totally dedicated to 1296 EME and one of the neatest I have seen. His HPA is a real beauty and his pride. Despite his space limitations Hoppy hopes to be able to expand to a 15' dish in the near future. He is also giving 3 cm EME some consideration. Look for him during the July SW.]

OE9XXI

Peter QSO'd on 1296 on 2 May **HB9BBD (57/57)** on SSB and **K3HZO** for an initial #, on 30 May **OZ6OL (44/57)** on SSB, **LU4DHD (339/569)** # and country 41, **LU8EDH (339/569)** and **LU6DW (439/569)** - on random, and on 27/28 June **W7CS (449/559)** #, **W6HD (549/569)** #, **OE9ERC (579/579)**, **OZ6OL (44/55)** on SSB and **OH2DG (549/579)**. On 5760 he heard **ZS6AXT** and worked **OE9ERC (559/549)**.

ON5RR

Mark writes -- Since the catastrophe weekend of 30 May the driver and final amp were rebuild. This job was only finished by 0800 on 21 June. This is why we missed our sked with **HA5SHF**. We also completely reorganized the shack. Together with my fantastic co-operator Michel (**ON7EH**), we did the last alignment and were on the air at about 0930. [Michel recently became the father of a beautiful daughter - congratulations!] We worked 5 initials: **PY5ZBU, K3HZO, W7GBI, W6HD and VE6TA**. We also completed with **ZS6AXT, F2TU, W2UHI, VE1ALQ, K5JL, K2UYH, N6BQ and KB2AH**. CWNR were **K2DH, OE9ERC, LA8LF and SM3AKW**. Activity was great and the rainy WX did not spoil the fun. This was the 1st time this year that we did not have to shut down due to technical or WX problems. Michel and I will be active next time, trying out some DSP and audio filters.

SM2CEW

Peter reports working the following initials on 432 since his last report: **F1CH, SV1BTR, WE2Y, W7CNK, N7EIJ, K7XD, IK0BZY** (single yagi and 600 w) and **W7EME**. His initial total on 432 is now up to #349. On 1296 the following stations were worked **S59DCD** for initial #96 and **OZ6OL #97**. Peter has upgraded to a YL1052 cavity amplifier on 1296 giving about 1 kw output. The feedline losses are still pretty high, but echoes have improved tremendously. Peter

and his family spent April visiting with VK3UM, and also made a trip to visit VK5MC. Both are putting up 30' dishes. VK3UM is mounting a Kennedy dish and VK5MC a homebrew dish. It fascinating to see the famous VK5MC rhombics for 144 MHz that has produced such a good signal via the moon from Australia. Peter is sorry to say that he will not be able to come to Paris, but is sure it will be a good and inspiring meeting. VE1ALQ: Darrell is working on a TWTa for 6 cm and hopes to be QRV in a couple of weeks. In June he worked **on 23 cm HA5SHF, G3LQR, ZS6AXT, W2UHI and others, and on 70 cm initials with DL6MEA and W7EME**. NA was V and Eur H. Others were worked on 432 but no other initials.

VE6TA

Grant has been busy this spring at work and not enough time for EME -- I did manage to get on for the June SW and was very pleased with the results. **On 1296 I worked K5JL, DD1XF for initial #60 (and EME all band initial 300), KB2AH, VE1ALQ, ON5RR #61 and Belgium, PY5ZBU #62 and SA - continent 5 and finally W4OP #63 and the state of FL. I thought condx overall were very good and the activity was high. I plan to be on 23 cm again next for the July SW and possibly work Oceana for WAC.**

VK4KAZ

Allan (QG62mp) reports that **on 432 he worked on 20 June DK3WG (O/M) for initial #8, partial JA5OVU (O/?), possible partial SM2CEW (O/?), nil K2UYH due to a sequencing error and nil KD4LT. He also reports that VK4AFL, Trevor QSO'd on 432 on 17 June DL4MEA (O/O) for initial #2, and on 20 June JA5OVU (O/O) #3. Allan is interested in skeds and can be reached on e-mail at:**

[Allan, VK4KAZ](#)

W2UHI

Frank worked on 23 cm in the June SW VE1ALQ, OZ6OL, G3LQR, K2UYH, DJ9YW, N6BQ, K5JL, DF3RU, K3HZO and W5LUA. DF9QX was heard but not worked.

W6HD

Tay is now QRV on 23 cm (CM98pf) and tells us about his results -- My initial #1 was **Frank, W2UHI**. He was also the 1st signal I heard on 23 cm after getting my dish fired up in early March this year. Frank mentored me through the whole process, provided a benchmark system and put up with a lot! My thanks to him. Hoppy, N6BQ also provided much help and encouragement. My system consists of a 6 m, 0.375 f/d, reflector and my own two ring scalar feed with a dielectric plate polarizer all mounted on a WW II radar antenna mount converted to 24 volts dc. [How about details of your feed for the NL?] Pointing accuracy is 0.1 deg, driven by an M squared dual controller. I use W9IP's NOVA as my main control program with RealTrack for planning and Doppler calculations. With 80 w at the feed, I'm a little weak, but can hear pretty well with a Tsys of 70 K. I use a wide IF bandwidth so that I can "see" using AF9Y's FFT routine and listen with a narrow audio filter. I was surprised by the pileup my peanut whistle caused Saturday, but was able to sort out and work everyone who called - the "seeing" really helps. **After working W2UHI on Saturday, I QSO'd on Sunday K2UYH, SM3AKW, OE9ERC, LA8LF, OH2AXH, K5JL, W5LUA, N6BQ, K2DH, ON5RR, EA6ADW and VE1ALQ.** Certainly an exciting morning for one who hadn't been "on the Moon for 35 years! There is an error in the address on my QSL cards. The ZIP is wrong. [You can reach Tay at (Henry Taylor Howard, PO Box 48, San Andreas, CA 95249), tel 209-754-3255, fax 209-754-1770 or e-mail:

[Tay, W6HD](#)

W7CS

Chuck (DM4200) is now QRV on 1296 EME with a 5 m dish and 100 w. He has heard W2UHI, DF3RU, K3HZO, K5JL, DJ9YW, W5LUA, N6BQ and K2UYH. You can reach Chuck at: [Chuck, W7CS by e-mail](#)

ZS6AXT

Ivo had hoped to include his 1st 6 cm QSO in this report, but didn't quite make it -- I worked on 23 cm on 31 May DJ9YW, HB9BBD, OZ6OL for initial #136 and EA6ADW, on 20 June OZ6OL and VE1ALQ - after this my HV PSU packed up for the night, and on 21 June with replaced diodes and more protective resistors F2TU, VE1ALQ (this time with T9), ON5RR, W2UHI, K2DH, G3LQR, KB2AH, OH2AXH, DF9QX, K5JL, K2UYH, SM3AKW, N6BQ and EA6ADW. The last four stations with heavy QSB. This was with an EL of 15 to 8 deg. I also heard DD1XF. My 6 cm tests with OE9ERC were not successful. Erich heard me, but I did not hear him. It appeared that my image was not suppressed enough in the transverter. Thus I built a new basic transverter. This time with 2 cup cavity filters, one for TX and one for RX. I then had problems with my preamps. In the end I managed to optimize a 2 stage LNA with ATF36163s of my own design which measures about 0.1 dB better in NF than my DJ9BV and W5LUA preamps. This gives me 12.7 dB Sun noise, 0.7 dB Moon noise and > 6 dB CS/G noise (horn only - not in the dish). The problem may be that the position of the horn feed is not yet optimal, or that my dish is just lousy for this band. I will try to improve things after my return from Eur. This is quite difficult as access to my feed is not easy and each change takes time. It seems that 6 cm is much more critical than the lower bands. I will not be QRV in July. Next SW will be 15/16 Aug, after my return. I hope to see all my old EME friends in Paris!

K2UYH

I spent most of my time on 1296 during the June SW as I had skeds on this band both days. The one 70 cm sked I had with VK4KAS was a bust as the Moon was well into the trees. My summer time Moon windows to both east and west are very bad. I now need an el > 25 degs to have minimal blockage to the west. My May QSO with HA5SHF was not complete. Csaba proposed extra skeds for both days of the June SW. Unfortunately at the times of both skeds, other stations were having skeds on the proposed freq (.040). I never copied him through the stronger stations. I did QSO on 23 cm on 20 June at 1020 W2UHI (559/569), 1032 nil HA5SHF, 1047 DJ9YW (559/549), 1109 DF3RU (549/539), 1118 partial K5JL - called on SSB and 1127 N6BQ (569/559), and on 21 June 1100 nil HA5SHF, 1131 K2DS (55/55) on SSB, 1140 ZS6AXT (559/549), 1213 ON5RR (559/549), 1240 VE1ALQ (559/549), 1250 K5JL (56/56) on SSB, 1258 OZ6OL (449/559), 1308 W2UHI (559/559), 1313 N6BQ (559/549) and 1325 W6HD (449/549) for initial #155.

NETNEWS

by G4RGK

HA5SHF reports 23 cm QSOs in June with VE1ALQ and EA6ADW.

W5LUA QSO'd RW3BP again on 6 cm. On 23 cm Al worked OZ6OL for a new one.

K2DH blew up his 23 cm PA during the June SW. He replaced a bad tube but needed to fix the bias circuit. Dave worked OZ6OL with just 60 w.

W7CNK on 432 worked JA2TY, VE1ALQ, DF3RU and OK1KIR in June. He heard nil during a sked with S52CW and HP3XUG and did not complete with PY5ZBU (no R's).

KL7HFQ heard nil from SV1BTR and W5ZN. He changed receive feedline to 1/2" Heliax and saw a big improvement.

K9ZZH is looking for 1296 skeds.

W7QX worked on 432 IK2IAD, DF3RU and OK1KIR. Heard were W7CNK and KA0RYT.

KB3PD will be off 70 cm for while. No skeds please. Rick burnt up a 7/8" connector.

WD5AGO is taking his 23 cm feed out and will concentrate on 70 cm through Sept.

OZ9AAR's logs and QSLs were lost during a recent move. Carsten asks that anyone that worked him on 23 cm to please send another QSL card and pictures if possible! He is very upset by this loss.

I5TDJ, Pierro worked on random W7CNK for initial #107.

LZ2US is getting back on 70 cm EME.

G0RUZ has moved QTH and is coming back on 23 cm EME.

PA3CSG worked AA5C on 10 GHz and will run with NU7Z and VE4MA when they are ready.

VO1AV Ron has 70 cm xvtr and other stuff to put together an EME station, but still needs to work on antennas.

VE4MA had some success with his 10 GHz TWTA (75watt tube) and is just about ready to go.

DL9KR has just returned from a 6 day trip to the US.

W4TJ is still plugging away at 23 cm.

K5JL heard nil from OE3JPC on 23 cm, but did work him on 70 cm.

K3HZO worked on 23 cm in June W2UHI, N6BQ and K5JL, heard several other stations, and had a partial with DD1XF (O/-). He will be QRT in July.

EA3UM has been doing a lot of business travel and as a result missed his May skeds with SB1BTR and W0GGM. Magi is still very much QRV and interested in skeds.

FOR SALE

OE9XXI has **cavities for TH327/347 (with blower and heater transformer) and TH308/328** available. Both cavities are commercial designs modified for 1296 operation. Contact Peter via e-mail at: Peter.OE9PMV

K1FO need to clear out some excess equipment among the items for sale are **a Kenwood TS-850S, DRU-2 digital recording unit, International Radio 400 Hz filters for the Kenwood line 8.8 MHz and 455 kHz IF's (TS-850, TS-940, TS-690 etc.), an Icom IC-271H, an ETO 30-70 MHz single 8874 amplifier, RF deck presently disassembled for conversion to 2x8874R's, a CDE HAM-3 rotator and TR-44 rotator.**

Call Steve at 203-421-3377.

KB3PD burnt up a 7/8" connector. He **needs connector #75-360 for PRODELIN hardline, or just a center pin.** Please get in touch with Rick if you can help at: [KB3PD](#) or call 302-737- 7966.

G0RUZ, Conrad is **looking for a dish and PA for 1296 EME.**

VO1AV is **looking for someone who is familiar with the transverter output of the IC735.** Contact Ron at (R & L Thompson, 9 Medcalf St., Gander, NF, Canada A1V 1R9), tel (709) 256-1179, Fax (709) 256-8638, or e-mail: [VO1AV](#)

KB2AH has a full line of cavity amps and 1, 2, 4 and 6 tube ring amps, lin/circular feed horns and LNAs for 432 and 1296. Tom also has mounting blocks for K1FO yagis.

[TOM, KB2AH Web Page](#)

for more details and pricing info e-mail:

[Tom](#)

or phone 908-223-5067, FAX 908-223-0901 (24 hrs) or voice 908-223-8124.

TECHNICAL

K1FO Summary:

WHAT YAESU DID RIGHT with the FT-847?	WHAT NEEDS IMPROVEMENT on the FT-847?
SSB Receive audio sounds great with the Collins mechanical filter.	Collins filters are optional and incredibly over priced
Covers MF-HF, 50, 144 & 430 MHz	No provision for adding bands such as 222 and 1296 MHz.
CW filter has excellent gain compensation	CW filter is over priced, is different than the filters in other Yaesu HF transceivers, a 250 Hz filter not available
Blue display looks great	No Clarifier readout
Power output level is the same on SSB, CW and FM.	Power varies across VHF bands. Cant disable CW break in.
AGC Fast / Slow remembers association with mode	AGC Fast-Slow has no memory association with bands and (CW- SSB etc.) can't be turned off.
Separate preamplifier and atten- uator switching with memory of Selections. Attenuator on VHF bands and HF.	Only one attenuator selection that is 20 dB on 432, Pre-amp and Selection have no memory.

	association on different HF bands. Attenuator is 20/20dB on 432 5/10 dB on 2m (PA in/out).
DSP filter bandwidth is very good.	DSP filter has VERY poor shape factor.
CW keyer built in.	Keyer is not a memory keyer.
Fast / Slow Tuning selection button.	Sense is backwards, I would prefer it to default to fast and slow is selected. Also, fast button effects to many items such as band switching are effected simultaneously by the FAST button. Should be able to program what functions the FAST button changes.
Pleasing front panel styling.	The FT-847 is just too plain small for a home station, Give me a FT-920 size radio with coverage through 450 MHz (1300 MHz?) with good DSP and a memory keyer. Requiring external antenna tuners and memory keyers defeats any advantages the FT-847's small size has. The knobs are too small and close together.
Separate amp switching circuits for HF and each VHF band with 24VDC open collector rating.	Uses hard to find 5 pin mini DIN connector, not supplied with FT-847 Switching transistor should have 40 VDC rating for safety factor.
Separate tuning knob for sub chan and split operation.	Knob is small, also used for clarifier, Cant operate split from memories like Kenwood radios, no clarifier clear button
Excellent synthesizer, 1 Hz steps, No clicks pops etc. Has reasonably Good dynamic range, sounds much More like a good HF radio than VHF multimodes, has a modern feel To it.	Performance is more akin to a lower end to mid range HF radio, (i.e FT-840) no ability to add bands like 222 MHz or 1296 MHz like a FT-920 or FT-1000MP class xceiver that also covers 50-144 & 430 MHz with provision for adding 222 and 1296.
VHF bands have reasonable receive sensitivity and dynamic range.	S-meter has very poor calibration. (at least on 432 MHz).
Pretty red, green and orange Lights on the front panel when In satellite mode.	No provision for using 144 MHz as an IF for microwave band transverters nor is there any provision to use 28 MHz as an IF for transverters. No provision for using higher frequency satellite modes. Power output spike make using it with RF out at minimum a dangerous proposition.

[G3LTF with 20 ft Dish.](#)

[12 GHz Counter by VE1ALQ](#)

FINAL

Thanks again to G4RGK for his help with the NETNEWS section of this NL. I gave Dave very little warning due to business travel during the past week. I should also express my thanks to Joe, K1RQG, who besides running the 20 m net also records the Netnotes from which the NETNEWS is condensed. (I can take advantage of Joe as he is an old friend.)

Does anyone have any information on Cor, VE7BBG? Cor was the original Skeds Coordinator for the NL. He has been receiving the NL from the start, but his envelopes have come back undelivered the past 2 months.

This was not a great day for producing the NL as I lost a sizable portion of the NL text - something I have not done (mercifully) for some years. The NL would have been longer and included the full text of Steve's review, if not for this loss. At least the NL should arrive on time.

I expect to get the Aug NL out just before I leave for Eur and the Paris EME Conference. I am not sure how I will handle the Sept NL as I plan to spend almost 3 weeks in Eur. I will work something out. Please keep the info coming. I hope to see all of you in Paris and off the the Moon during the July SW.
73, Al - K2UYH



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